

detecting the amounts of detectable kinase inhibitor and/or the detectable candidate kinase inhibitor compound bound to the kinase as a measure of the presence of a candidate kinase inhibitor compound that competes with the kinase inhibitor for binding to the kinase.

64.(amended) A kinase inhibitor compound identified according to claim 60.

Remarks

Applicants have canceled and amended claims to reduce filing fees and to eliminate multiple dependent claim, without prejudice to reintroducing any of the canceled or amended claims in this application or in continuing applications. No new matter has been added.

Respectfully submitted,


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Amended Claims

21.(amended) A kinase binding molecule comprising a binding motif for a phosphorylation site of a kinase identified according to [any of] claim[s] 1[-20].

26.(amended) A method for inhibiting phosphorylation of proteins by a kinase, comprising,
contacting the kinase with an amount of the kinase binding molecule of [any of] claim[s] 21[-23 or the composition of claim 24] effective to inhibit the phosphorylation.

27.(amended) A method for treating a condition that includes phosphorylation of proteins by a kinase, comprising,
administering to a subject an amount of the kinase binding molecule of [any of] claim[s] 21[-23 or the composition of claim 24] effective to inhibit the phosphorylation of the proteins by the kinase.

30.(amended) A kinase inhibitor comprising a binding motif for a phosphorylation site of a kinase identified according to [any of] claim[s] 1[-20], wherein the single non-degenerate phosphorylatable amino acid is replaced by an amino acid that cannot be phosphorylated by the kinase to which the inhibitor binds.

36.(amended) A composition comprising the kinase inhibitor of [any of] claim[s] 30[-33] and a pharmaceutically acceptable carrier.

38.(amended) A method for inhibiting phosphorylation of proteins by a kinase, comprising,
contacting the kinase with an amount of the kinase inhibitor of [any of] claim[s] 30[-35 or the composition of claim 36] effective to inhibit the phosphorylation.

39.(amended) A method for treating a condition that includes phosphorylation of proteins by a kinase, comprising,

administering to a subject an amount of the kinase inhibitor of [any of] claim[s] 30[-35 or the composition of claim 36] effective to inhibit the phosphorylation of the proteins by the kinase.

42.(amended) A method for validating a kinase as a target for inhibition for the treatment of a condition, comprising

providing a molecule comprising a binding motif for a phosphorylation site of a kinase as claimed in [any of] claim[s] 1[-20],

contacting a biological sample containing a kinase suspected of being involved in the causation of the condition with the molecule for a time sufficient to permit binding of the molecule and the kinase, and

determining the effect of the molecule on one or more biological processes mediated by the kinase.

46.(amended) A method for inhibiting a ZAP-70 kinase comprising,

contacting the ZAP-70 kinase with an amount of a kinase inhibitor as claimed in [any of] claim[s] 30[-35], effective to inhibit the ZAP-70 kinase.

48.(amended) A method for treating a condition mediated by a ZAP-70 kinase comprising

administering to a subject in need of such treatment an amount of a kinase inhibitor as claimed in [any of] claim[s] 30[-35 or a composition as claimed in claim 36], effective to inhibit the ZAP-70 kinase.

52.(amended) A method for inhibiting transcription mediated by a ZAP-70-responsive promoter sequence, comprising

contacting a biological sample, cell or organism that comprises a ZAP-70-responsive promoter sequence operably linked to a nucleic acid molecule with an amount of a kinase inhibitor as claimed in [any of] claim[s] 30[-35] effective to inhibit the transcription of the nucleic acid molecule mediated by the ZAP-70-responsive promoter sequence.

55.(amended) A method for treating a condition mediated by transcription mediated by a ZAP-70-responsive promoter sequence, comprising

administering to a subject in need of such treatment an amount of a kinase inhibitor as claimed in [any of] claim[s] 30[-35 or a composition as claimed in claim 36], effective to inhibit the transcription mediated by the ZAP-70-responsive promoter sequence.

- 60.(amended) A method for identifying a kinase inhibitor compound, comprising
 providing a kinase, a kinase inhibitor that binds the kinase, and a candidate kinase inhibitor compound,
 contacting the kinase with the candidate kinase inhibitor compound and the kinase inhibitor under conditions that permit binding of the kinase inhibitor to the kinase, wherein either or both of the candidate kinase inhibitor compound and the kinase inhibitor are detectable, and wherein either or both of the candidate kinase inhibitor compound and the kinase inhibitor comprises a sequence determined according to [any of] claim[s] 1[-20],
 separating the kinase from the unbound kinase inhibitor and unbound candidate kinase inhibitor compound, and
 detecting the amounts of detectable kinase inhibitor and/or the detectable candidate kinase inhibitor compound bound to the kinase as a measure of the presence of a candidate kinase inhibitor compound that competes with the kinase inhibitor for binding to the kinase.

- 64.(amended) A kinase inhibitor compound identified according to [any one of] claim[s] 60[-63].